



## Anadarko Petroleum Corp.

### Large Exploration Expense Drives 1Q17 EPS/CFPS Miss but EBITDX Beats; Maintains 2017 Guidance

#### 1Q EPS/CFPS misses on large exploration expense but EBITDX beats

Clean 1Q EPS (loss) of (\$0.60) was much wider than UBSe of (\$0.28) & consensus of (\$0.24) with the miss vs. UBSe driven entirely by a much higher than expected exploration expense due to the dry hole at Shenandoah-6 (impacting EPS by >\$0.30/share). CFPS of \$1.84 also missed consensus' \$1.99 & UBSe of \$2.11 while EBITDX of ~\$1.66bn exceeded expectations. Production fell 4% YoY to 795 MBoed, towards the high end its "adjusted" guidance range of 779-801 MBoed (including volumes from divested assets) but just below UBSe of 801 MBoed. Per-unit costs rose 29% YoY to \$6.57/Mcfe, ~9% above UBSe due to the higher exploration expense.

#### No change to 2017 guidance but 2Q volume guide a bit light vs. expectations

APC maintained its 2017 guidance which includes a capex budget of \$4.5-\$4.7bn (+60-68% YoY) and volumes of 644-655 MBoed (roughly flat YoY pro-forma for divestitures). Production guidance excludes volumes associated with its recent Eagle Ford and Marcellus divestitures that closed in 1Q17 (contributed a combined ~124 MBoed during the quarter) implying APC's "reported" production is ~675-686 MBoed. APC also disclosed 2Q17 volume guidance of 626-648 MBoed, below consensus of 663 MBoed and our prior estimate of 653 MBoed. We lowered our 2017 CFPS estimate from \$9.15 to \$8.90 (mostly on the 1Q miss) and made minor changes to 2018 CFPS.

#### Other key takeaways from 1Q results:

1) investigators confirmed the recent home explosion in Firestone, CO was caused by an abandoned, severed one inch gas line that was still connected to APC's nearby well & had not been sealed off properly (several uncertainties are still under investigation including when the line was cut, how it was cut, and who is responsible); 2) currently at 15 rigs and 6 rigs in the Delaware and DJ Basins, respectively (vs. 9 and 5 rigs at YE16); 3) testing a new completion design in the DJ Basin with cumulative oil production outperforming current type curve by >10% after ~100 days; & 4) Calpurnia (deepwater GoM) and Gorgon (Colombia) exploration wells encountered 20 feet of net oil pay and 260-360 feet of gas pay, respectively, while the Shenandoah-6 appraisal well was dry.

#### Valuation: discount to peers on price/NAV and EV/DACF

Our \$80 price target assumes ~0.70x NAV, or 7.0x normalized 2017E DACF.

#### Equities

Americas  
Oil Companies, Secondary

12-month rating **Buy**

12m price target **US\$80.00**

Price **US\$56.28**

RIC: APC.N BBG: APC US

#### Trading data and key metrics

52-wk range **US\$72.69-44.99**

Market cap. **US\$31.5bn**

Shares o/s **560m (COM)**

Free float **100%**

Avg. daily volume ('000) **1,167**

Avg. daily value (m) **US\$73.3**

Common s/h equity (12/17E) **US\$15.4bn**

P/BV (12/17E) **2.0x**

EPS (UBS, diluted) (US\$) **12/17E**

	From	To	% ch	Cons.
<b>Q1</b>	(0.28)	(0.60)	NM	(0.24)
<b>Q2E</b>	(0.02)	(0.06)	NM	(0.08)
<b>Q3E</b>	0.17	0.18	6	0.02
<b>Q4E</b>	0.33	0.37	12	0.08
<b>12/17E</b>	0.20	(0.10)	NM	(0.23)
<b>12/18E</b>	1.80	1.50	-17	0.64
<b>12/19E</b>	3.65	3.65	NM	2.17

William A. Featherston

Analyst

william.featherston@ubs.com

+1-212-713 9701

Michael Ziffer, CFA

Associate Analyst

michael.ziffer@ubs.com

+1-212-713 2257

Christopher Zhang, CFA

Associate Analyst

christopher.zhang@ubs.com

+1-212-713 9957

	12/14	12/15	12/16	12/17E	12/18E	12/19E	12/20E	12/21E
<b>EBITDX</b>	10,878	5,126	4,324	6,866	8,454	10,573	11,649	12,716
<b>DACF</b>	9,683	5,333	3,647	5,665	7,230	9,965	10,969	11,466
<b>CFPS (UBS, US\$)</b>	17.83	8.87	5.30	8.90	11.65	14.85	16.40	17.90
<b>EPS (UBS, US\$)</b>	4.13	(2.01)	(3.08)	(0.10)	1.50	3.65	4.25	4.95
Profitability/valuation	12/14	12/15	12/16	12/17E	12/18E	12/19E	12/20E	12/21E
Prod per share growth %	7.2	-1.2	-9.0	-17.1	3.8	7.5	6.5	7.5
ROACE %	5.3	(0.4)	(1.5)	1.3	3.8	6.5	7.1	7.5
EV/EBITDX x	5.6	10.4	9.8	6.4	5.1	4.0	3.5	3.1
EV/DACF x	6.3	10.0	11.6	7.8	5.9	4.2	3.7	3.4
P/CFPS (UBS) x	5.3	8.5	10.0	6.3	4.8	3.8	3.4	3.1

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations based on an average share price that year, (E) based on a share price of US\$56.28 on 02 May 2017 19:34 EDT

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Anadarko Petroleum Corp.

Buy (Price target US\$80.00)

**UBS Research THESIS MAP** a guide to our thinking and what's where in this report

## PIVOTAL QUESTIONS

**Q: Can a large-cap, global E&P offer attractive long-term oil growth?**

While there is investor concern that large-cap, global E&Ps will struggle to deliver competitive long-term growth, APC is an exception. Notably, APC plans to direct the ~\$6 billion in free cash flow that should be generated from its recently acquired deepwater Gulf of Mexico assets over the next five years to its onshore activities in the Delaware and DJ Basins where it has added a combined 13 rigs since 3Q and expects to increase activity further which should more than double its production from these fields to 600+ MBoed by 2020. This should enable +15% (+11% organically, ex Gulf Mexico acquisition) companywide oil CAGR from 2016-21, assuming ~\$55/Bbl WTI and \$3/Mcf Henry Hub. Compared to other large-cap E&Ps that can deliver comparable long-term growth, APC trades at a discount to these peers.

**Q: What does APC plan to do with its large cash position?**

After closing its Marcellus and Eagle Ford divestitures last quarter, APC now has ~\$5.8 billion of cash on its balance sheet. We expect it to seek bolt-on acquisition opportunities in the Delaware and DJ basins to deploy this cash. Should no attractive M&A opportunities arise and if oil prices remain above \$50/Bbl, we would expect APC to boost its capex to levels in excess of operating cash flow and accelerate longer-term growth above its +15% CAGR target.

## UBS VIEW

APC should deliver above-average cash flow per debt-adjusted share growth over the next several years and has a significant inventory of unbooked deepwater discoveries & unconventional US resources that offer longer term growth opportunities or are asset monetization candidates to improve its balance sheet and/or help fund its development projects. Notably, APC plans to direct the free cash flow from its recently acquired Gulf of Mexico assets to accelerating US onshore activity which should enable companywide oil growth of +15% (+11% organically) per annum through 2020 assuming ~\$55/Bbl (vs. peers' mid-single digit growth). And following asset sale proceeds of >\$7bn since the beginning of 2016, we expect it will continue to evaluate material divestitures which should help close its price/NAV discount vs. peers.

## EVIDENCE

Outperforms peers on several key metrics: 1) above-avg unbooked-to-proved ratio (~6.7x vs. large cap peers' ~4.5x); 2) 2017-21 cash flow per debt-adjusted share growth (metric with highest correlation to intra-sector relative performance) of ~10% per annum (vs. peers' ~8% at futures strip prices); & 3) 2018-20 oil growth of ~13% per annum (vs. peers' ~9% per annum)

## WHAT'S PRICED IN?

At strip prices, APC is trading at a P/NAV of 0.69x vs. peers' 1.28x. APC also trades at a ~1 turn discount to peers on 2018E EV/DACF, vs. its historical ~0.2x turn premium to the group.

## UPSIDE / DOWNSIDE SPECTRUM



## COMPANY DESCRIPTION

Anadarko Petroleum is an independent oil and gas exploration and production company with operations in onshore resource plays in the Rocky Mountains, the southern US, and the...

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## COMMENTARY

[return ↑](#)**Key Highlights from 1Q Results**

- APC maintained its 2017 capex budget of \$4.5-\$4.7 billion (up ~60-68% YoY and excluding WES spending of ~\$930 million). We'd note APC is allocating ~\$560 million to midstream spend this year, well above last year's midstream capex of ~\$150 million. The bulk (~80%) of APC's capex will be allocated towards its **U.S. onshore upstream and midstream developments** where it expects to spend ~\$1.9 billion, of which ~\$840 million and ~\$820 million will be spent in the DJ and Delaware Basins upstream activity, respectively. The company is planning to average 10-14 rigs to drill >150 gross wells (vs. an average of ~7 rigs and ~104 wells last year) in the Delaware Basin and 5-6 rigs to drill ~290 wells (vs. an average of ~2 rigs and ~90 wells last year). APC also expects to spend ~\$560 million on the expansion of its midstream infrastructure in the Delaware Basin. Meanwhile, APC is planning to spend ~\$1.1 billion on its **deepwater Gulf of Mexico, Algeria, and Ghana assets** and another ~\$650 on **exploration** to drill up to 10 exploration/appraisal wells in the deepwater Gulf of Mexico, Cote d'Ivoire, and Colombia. APC will also spend ~\$120 million on its Mozambique LNG project and ~\$100 million on corporate/other. **Assuming 2017 capex of ~\$4.6 billion and current futures strip prices, we forecast APC will generate a FCF deficit (after dividends) this year of ~\$455 million.**
- APC also reiterated its 2017 production guidance of 644-655 MBoed (357-362 MBbl oil) which excludes volumes associated with its **Eagle Ford and Marcellus divestitures that closed in 1Q17**. But with Eagle Ford and Marcellus contributing ~40 MBoed and ~84 MBoed to 1Q volumes, respectively, we estimate APC's implied "reported" production range is ~675-686 MBoed (see Figure 1 below). Meanwhile, APC's 2017 production guidance includes volumes (~80 MBoed, ~80% oil) from its Gulf of Mexico acquisition which closed on December 15<sup>th</sup> and we estimate implies a pro-forma 2016 base of ~651 MBoed (Figure 2 below). Thus, we estimate APC's "organic" total and oil production growth for 2017 is roughly flat and up ~3% YoY, respectively while natural gas should decline ~7% YoY and NGLs should increase ~9% YoY. **We left our FY17 production estimate roughly unchanged at ~688 MBoed, at the high end of APC's implied "reported" volume guidance.**

**Figure 1: APC's Same-Store Sales and Implied Reported Production Guidance in 2017 vs. 2016**

	2016	2017 <sup>(1)</sup>
Oil (MBbld)	287	360
NGLs (MBbld)	90	98
Natural Gas (MMcfd)	1,187	1,185
<b>Total "Same-Store Sales" (MBoed)</b>	<b>575</b>	<b>655</b>
Eagle Ford (MBoed) - closed March 1st		10
Marcellus (MBoed) - closed March 31st		21
<b>Total "Reported" Production (MBoed)</b>	<b>793</b>	<b>686</b>

Source: Company documents and UBS estimates

(1) assumes mid-point of APC's 2017 production guidance

**Figure 2: APC's Pro-Forma (Adjusted for GoM Acquisition) Production Guidance in 2017 vs. 2016**

	2016 <sup>(1)</sup>	2017	YoY Change
Oil (MBbld)	348	360	3.4%
NGLs (MBbld)	90	98	8.9%
Natural Gas (MMcfd)	1,279	1,185	-7.4%
<b>Total Pro-Forma Production (MBoed)</b>	<b>651</b>	<b>655</b>	<b>0.6%</b>

Source: Company documents and UBS estimates

(1) assumes ~80 MBoed from GoM acquisition is in for FY16

- APC disclosed 2Q17 volume guidance of 626-648 MBoed, below consensus of 663 MBoed and our prior estimate of 653 MBoed. We'd note APC has a strong track record of setting conservative quarterly targets as well as initial annual production targets which it then beats. As outlined in Figure 3 below, APC has reported quarterly production above the mid-point of its original guidance range in 24 of the past 25 quarters by an average of 2.4%. And as shown in Figure 4, APC has beaten the mid-point of the full year guidance it provides at the beginning of each year for each of the last eight years, and has exceeded the top end of the range in six of those years.

**Figure 3: APC Has Historically Exceeded the High End of Quarterly Guidance**

	APC Guidance (MBoed)	Midpoint of Guidance	Reported Production	Production Beat vs. Midpoint	Production Beat vs. High End
1Q17	656-678	667	671 <sup>(1)</sup>	0.6%	-1.0%
4Q16	696-717	706.5	739 <sup>(2)</sup>	4.6%	-3.1%
3Q16	739-761	750	780	4.0%	-2.5%
2Q16	780-802	791	792	0.1%	-1.2%
1Q16	813-815	824	827	0.4%	-1.0%
4Q15	739-761	750	779	3.9%	-2.4%
3Q15	772-793	782.5	787	0.6%	-0.8%
2Q15	846-868	857	846	-1.3%	-2.5%
1Q15	878-907	892.5	934.3	4.7%	3.0%
4Q14	837-859	848	853.8	0.7%	-0.6%
3Q14	826-848	837	848.7	1.4%	0.1%
2Q14	791-813	802	847.7	5.7%	4.3%
1Q14	770-793	781.5	802	2.6%	1.1%
4Q13	771-791	781	805.5	3.1%	1.8%
3Q13	757-779	768	775.2	0.9%	-0.5%
2Q13	730-756	743	750.2	1.0%	-0.8%
1Q13	740-769	754.5	793.7	5.1%	3.1%
4Q12	707-730	718.5	741.2	3.2%	1.5%
3Q12	707-725	716	738.5	3.1%	1.9%
2Q12	708-722	715	742	3.8%	2.8%
1Q12	671.5-687.7	679.5	703.7	3.5%	2.3%
4Q11	652-681	666.5	683	2.5%	0.3%
3Q11	636-661	648.5	659.5	1.7%	-0.2%
2Q11	667-686	576.5	684.7	1.2%	-0.2%
1Q11	656-685	675.5	690	2.1%	0.7%

Source: Company documents

(1) Excludes volumes associated with asset sales which contributed 124 MBoed to 1Q17 production but excluded from APC's guidance

(2) Excludes volumes associated with asset sales and acquisitions which contributed 35 MBoed to 4Q16 production but excluded from APC's guidance

**Figure 4: APC's Track Record of Exceeding Full Year Production Guidance**

	2009	2010	2011	2012	2013	2014	2015*	2016*
Production Growth Guidance (Start of Year)	1-3%	3-5%	4-6%	3-5%	3.8-5%	6-7%	(2%)-0%	(2%)-(4)%
Full Year Production Growth	7%	7%	6%	8%	6.2%	7.8%	4.0%	2.7%
<b>Beat vs. Midpoint of Guidance</b>	<b>5%</b>	<b>3%</b>	<b>1%</b>	<b>4%</b>	<b>1%</b>	<b>1%</b>	<b>5.0%</b>	<b>4.7%</b>

Source: Company documents

\*Adjusted 2015 full-year production growth to exclude ~31.1 MBoed from asset sales (APC's reported 2015 volumes were 836.1 MBoed and pro-forma – adjusted for asset sales – is 805 MBoed)

\*Adjusted 2016 full-year production growth to exclude ~67 MBoed from asset sales/acquisitions (APC's reported 2016 volumes were 793 MBoed and pro-forma – adjusted for asset sales – is 726 MBoed)

- APC made no change to its long-term (2016-21) oil production CAGR of +15% with a 2021 target of ~600 MBBbl of oil production. However, we'd note that its long-term oil production CAGR removes volumes from its 2016 base related to its Gulf of Mexico acquisition; including these volumes in the 2016 base implies an "organic" oil production CAGR of ~11%. Nonetheless, APC expects to deliver this growth "utilizing cash inflows" at ~\$55/Bbl WTI and \$3/Mcf Henry Hub, in line with our model's expectations. But assuming the current depressed futures curve, we estimate APC would have free cash flow deficits to the tune of ~\$850 million per annum from 2018-20 which could presumably be funded by its cash war chest. APC's long-term production will be supported by the continued growth of its onshore US unconventional portfolio (e.g. Delaware and DJ Basins) and the 3Q16 start-up at the TEN complex in Ghana. In order to achieve this growth, APC expects to ramp activity toward ~600 gross wells/year in each play, up from 90 gross wells in the Delaware and 104 in the DJ Basin turned online last year. *Beyond this year, we forecast 2018 companywide production growth of ~5% YoY and oil growth of 15%; from 2019-21, we forecast production growth of >7% per annum and growth in oil production of 11% per annum.* The outsized 2018 oil growth is driven by APC benefitting from adding wells that are currently being choked back after its midstream infrastructure is largely in place and the company shifts to pad development in 2H17.
- APC expects considerable margin improvement in 2017 on the combination of less gassy assets from divestitures and more oil from its recent Gulf of Mexico acquisition. For reference, APC divested assets last year with a combined >900 MMcf/d of natural gas production (~39% of its FY15 natural gas production) while it acquired Gulf of Mexico assets with production of ~80 MBoed (>80% oil). As such, APC expects its companywide oil mix to increase from ~40% in 2016 to ~55% this year which should boost its EBITDX/Boe by ~25% YoY from ~\$19.50 last year to ~\$24 in 2017. And we expect its margins to continue improving with its long-term oil production CAGR increasing its oil mix to ~63% by 2020.

- APC should generate higher cash flow per debt-adjusted share growth over the next several years compared to peers under current futures strip prices.** We prefer to measure E&P companies' growth on a debt-adjusted per share basis given varying degrees of capital allocation between capex, share repurchases, and debt reduction. This metric has the highest correlation to intra-sector relative performance. We forecast APC to generate cash flow per debt-adjusted share growth of 10% annually over 2017-21, compared with the global large cap E&P peer average of 8%. Measured on production per debt-adjusted share, we forecast APC posts a 3% CAGR over 2017-21, roughly in line with the global peer average over the same timeframe. We outline APC's debt-adjusted production and cash flow growth vs. peers in Figure 5.

**Figure 5: APC's Debt-Adjusted Production and Cash Flow per Share Growth vs. Peers**

Global E&Ps	Production (Bcfe) per DA Share						
	2016	2017	2018	2019	2020	2021	'17-21 CAGR
Apache Corporation	-2%	-10%	11%	6%	4%	6%	7%
ConocoPhillips	-12%	0%	-1%	0%	0%	-1%	0%
Hess Corporation	-24%	-8%	3%	0%	2%	4%	2%
Marathon Oil	-31%	-4%	1%	10%	9%	9%	7%
Murphy Oil	-25%	0%	3%	-1%	4%	-5%	0%
Noble Energy	4%	-12%	1%	16%	19%	20%	14%
Occidental Petroleum	-11%	-6%	5%	3%	0%	-1%	2%
Average	-14%	-6%	3%	5%	5%	5%	4%
Anadarko Petroleum	-16%	-11%	4%	4%	3%	4%	3%

Global E&Ps	Discretionary Cash Flow per DA Share						
	2016	2017	2018	2019	2020	2021	'17-21 CAGR
Apache Corporation	-32%	33%	1%	2%	12%	7%	5%
ConocoPhillips	-43%	67%	24%	-8%	2%	-1%	4%
Hess Corporation	-62%	64%	1%	2%	9%	10%	6%
Marathon Oil	-52%	80%	0%	17%	17%	17%	13%
Murphy Oil	-46%	54%	0%	-6%	4%	-2%	-1%
Noble Energy	-24%	-1%	14%	28%	36%	31%	27%
Occidental Petroleum	-35%	33%	7%	3%	0%	2%	3%
Average	-42%	47%	7%	6%	12%	9%	8%
Anadarko Petroleum	-46%	54%	12%	11%	9%	9%	10%

Source: UBS Estimates

Note: Based on current NYMEX natural gas, WTI and Brent strip prices (2017- \$3.29/MMBtu, \$49.26/Bbl & \$52.57/Bbl; 2018- \$3.07/MMBtu, \$49.2/Bbl & \$51.37/Bbl; 2019- \$2.87/MMBtu, \$49.43/Bbl & \$51.17/Bbl; 2020- \$2.86/MMBtu, \$50.09/Bbl & \$51.57/Bbl; 2021 & LT- \$2.9/MMBtu, \$50.74/Bbl & \$52.45/Bbl). All figures include the effect of disclosed hedge positions.

- DJ Basin equities (including APC) have sold off recently after a home explosion occurred near one of APC's legacy vertical wells in Firestone, CO...prompting concerns that the accident may re-open discussions of increased setback rules in the basin.** Last week, APC disclosed it had shut in 13 MBoed (75% natural gas) from ~3,000 legacy vertical wells in the DJ Basin following a home explosion in Firestone, CO which was located ~200

feet from an Anadarko vertical well. APC and other DJ Basin E&Ps have since underperformed the XOP (oil and gas, exploration and production ETF) by 3-4% since the announcement after market close on April 26<sup>th</sup> (see Figure 6). Yesterday after the market close, investigators confirmed the explosion was caused by an abandoned, severed one inch gas line that was still connected to APC's nearby well that had not been sealed off properly; the odorless gas saturated the nearby soil and seeped into the home through a French drain and a sump pump in the basement, and was ultimately ignited by an unknown cause.

- **There are still several key uncertainties, including** when the line was cut, how it was cut, and who is responsible...all of which will be resolved in the ongoing investigation. However, given two previous attempts by anti-development groups to reduce the pace of oil and gas development in Colorado, we believe this unfortunate tragedy has and may continue to provide headline risk for APC and other operators in the basin.
- **Market concerns stem from Colorado's history of getting public pushback on oil and gas drilling in the state.** For reference, last year there were many different proposed ballot initiatives affecting Colorado's oil and gas industry with the most concerning one being initiative #78. This initiative (which never acquired enough signatures to make it on the ballot) would have required a 2,500-foot buffer (vs. 500 feet currently) between all new oil and gas development, including fracking, from both occupied structures and areas of special concern, including areas such as waterways, public parks, and open spaces. Notably, the proposal would have reduced available drilling locations by >90%. Thus, the recent home explosion in Firestone, CO is prompting concerns that this tragedy will at a minimum raise operating costs and potentially embolden anti-development efforts similar to initiative #78. Fortunately, the Raise the Bar initiative (Amendment 71) passed last year, which makes future ballot initiatives clear a higher hurdle of also securing 2% of eligible voters in each senate district (as well as signatures equaling 5% of the previous elections voter turnout) as well as requiring an initiative to secure >55% approval to pass.

**Figure 6: DJ Basin E&Ps Have Underperformed the XOP by ~3-4% Since 4/26**

<b>Ticker</b>	<b>4/26 Closing</b>	<b>Current</b>	
	<b>Price</b>	<b>Price</b>	<b>% Change</b>
APC	\$59.96	\$56.28	-6%
BBG	\$4.06	\$3.59	-12%
PDCE	\$58.23	\$54.77	-6%
SYRG	\$8.02	\$7.57	-6%
XOG	\$16.91	\$15.83	-6%
<b>Average</b>			<b>-7%</b>
<b>XOP</b>	<b>\$35.87</b>	<b>\$34.67</b>	<b>-3%</b>

Source: FactSet

- APC provided a brief exploration update. In the **deepwater Gulf of Mexico**, the **Calpurnia** exploration well encountered 20 feet of net-oil pay and was subsequently sidetracked updip where it found nearly 60 net feet of true vertical thickness oil pay. The wellbore was temporarily abandoned and is expected to be utilized for future production as a tieback to one of APC's nearby operated facilities at Heidelberg or Caesar/Tonga with first production possibly within 18 months. Meanwhile, the **Shendandoah-6** appraisal well and subsequent sidetrack did not encounter the oil-water contact on the eastern portion of the field. APC has currently suspended appraisal activity while it evaluates the path forward, including monetizing the field or abandoning it as economics are marginal at current oil prices. We carry just \$300 million worth of value for the field in our NAV. In **Colombia**, APC had a discovery at the **Gorgon** exploration well which encountered 260-360 feet of gas pay, its third offshore discovery although we certainly believe it would prefer to find liquids.

## Valuation: Discount to Peers on P/NAV and EV/DACF

- Large discount to peers on price/NAV basis.** On a price/NAV basis assuming futures strip prices, APC trades at 0.69x NAV, well below the average price/NAV multiple in our large-cap E&P coverage of 1.28x. On the UBS price deck, APC is valued at a 0.49x NAV, also a significant discount to the peer average of 0.65x. We view P/NAV as the most relevant comparative multiple for APC given the material exploration success (e.g., Mozambique) that is not yet contributing to current cash flow but certainly has measurable value, as well as the value of WGP (\$7.6 billion of equity net to APC) which contributes minimal cash flow to APC.
- APC trades at 9.0x and 8.2x 2017-18E DACF under current strip prices, respectively.** Its 2017-18E multiples are ~1x below its peer averages, compared to its historical average of a 0.2x premium, despite material value (Mozambique LNG, WGP) not contributing to 2017-18 cash flow.
- Adjusting for its stake in WGP, we estimate APC's E&P business is being valued at 8.8x and 8.1x 2017-18E DACF, still 1.2x and 1.0x below the peer averages, respectively under strip, despite superior debt-adjusted cash flow per share growth outlook.**

**Figure 7: APC's Valuation vs. Peers Under Various Oil and Gas Price Scenarios**

Price 5/2/2017	EV/DACF Hist. Avg.	Valuation Under UBS Price Deck						Valuation Under NYMEX Strip Prices					
		EV/DACF			P/NAV			EV/DACF			P/NAV		
		2017E	2018E	2019E	1P	2P	2017E	2018E	2019E	1P	2P	2017E	2018E
Apache Corporation	\$48.40 <sup>1</sup>	6.7x	7.0x	6.1x	4.9x	1.53x	0.69x	8.9x	8.5x	8.2x	NA	1.42x	
Chesapeake Energy	\$5.32	9.2	8.1	6.1	4.4	1.31	0.75	8.7	8.0	7.6	NA	NA	
ConocoPhillips	\$46.70	7.8	7.6x	5.4x	4.1x	NA	NA	9.4x	7.3x	8.5x	NA	NA	
Devon Energy	\$38.85	6.8	8.7	6.6	4.9	1.25	0.57	10.2	9.7	9.9	1.91	1.24	
Encana	\$10.59	7.8	11.4x	7.3x	5.2x	NA	0.53x	12.8x	10.0x	9.3x	NA	1.20x	
EOG Resources	\$91.87	8.2	10.2	7.6	5.1	NA	0.68	12.1	10.6	8.7	2.26	1.30	
Hess Corporation	\$47.01	6.9x	8.3x	7.1x	5.8x	1.10x	0.71x	11.5x	11.2x	11.1x	2.01x	1.32x	
Marathon Oil	\$14.64	6.0	7.4	5.5	3.9	1.34	0.65	8.0	7.9	5.9	2.30	1.67	
Murphy Oil	\$25.91	6.7x	5.3x	4.4x	4.0x	0.98x	0.60x	5.9x	5.9x	6.0x	NA	1.33x	
Noble Energy	\$31.42	7.5	7.7	5.8	3.9	NA	0.51	9.3	8.2	5.6	1.94	0.89	
Occidental Petroleum	\$60.04	3.4x	9.8x	8.1x	6.9x	1.16x	0.76x	11.7x	11.0x	10.8x	1.38x	1.15x	
Average		7.0x	8.4x	6.4x	4.9x	1.25x	0.65x	10.0x	9.1x	8.4x	1.97x	1.28x	
Anadarko Petroleum	<b>\$56.28</b>	7.2x	7.7x	5.9x	4.6x	0.90x	0.49x	9.0x	8.2x	7.5x	1.08x	0.69x	
Anadarko Petroleum (exc. WGP)		7.2x	5.3x	4.1x				8.8x	8.1x	7.6x			

Source: Company reports and UBS estimates

Notes: Based on UBS official NYMEX natural gas and WTI and ICE Brent crude oil commodity price forecasts of: 2017- \$3.20/MMBtu, \$57.50/Bbl & \$59.80/Bbl; 2018- \$3.00/MMBtu, \$63/Bbl & \$65/Bbl; 2019 & LT- \$3.25/MMBtu, \$68/Bbl & \$70/Bbl.

Note: Based on current NYMEX natural gas, WTI and Brent strip prices (2017- \$3.29/MMBtu, \$49.26/Bbl & \$52.57/Bbl; 2018- \$3.07/MMBtu, \$49.2/Bbl & \$51.37/Bbl; 2019- \$2.87/MMBtu, \$49.43/Bbl & \$51.17/Bbl; 2020- \$2.86/MMBtu, \$50.09/Bbl & \$51.57/Bbl; 2021 & LT- \$2.9/MMBtu, \$50.74/Bbl & \$52.45/Bbl). All figures include the effect of disclosed hedge positions.

## Operational Highlights

Although lower oil prices prompted a near 50% YoY reduction in capital spending last year, APC has materially ramped up US onshore activities since 3Q16 and continued to increase its rig count which currently stands at 21 rigs (up from 17 at the end of January). APC's long-term production growth will be supported by the continued investment in the Niobrara and Delaware Basin (with most other US onshore development plans cut back almost entirely), the 3Q16 start-up at the TEN complex in Ghana, and the start-up at Mozambique next decade. The company is targeting a 2016-20 oil production CAGR of 15% in a \$50-\$60/Bbl price environment, and estimates it holds net risked resource potential of +16 BBoe (1.7 BBoe of proved reserves, 5 BBoe in the DJ and Delaware, 2.5 BBoe in other US onshore, 1.5 BBoe in the deepwater GoM, 3 BBoe in Mozambique, and >2 BBoe risked resources from international and exploration. APC expects to convert 2 BBoe of this resource to proved over the next three years. We highlight updates for each core operating region below:

### Onshore Resource Plays

- In the Permian where it holds 245,000 net acres, APC increased the resource estimate of its southern Delaware Wolfcamp position to 3+ BBoe on its investor call in March from the 2+ BBoe disclosed previously. APC raised its Wolfcamp A type well EUR from 1,000+ MBoe to 1,500+ MBoe as it changed its type well from a 4,500-foot lateral "short-lateral-equivalent" (SLE) well to a 7,500-foot lateral "mid-lateral-equivalent" (MLE) well. Despite the longer lateral, APC continues to estimate 6,000+ drilling locations for its new Wolfcamp A wells with well cost of \$7.0 million (vs \$5.1 million for 4,500 foot horizontals implying an 18% reduction in cost per lateral foot). APC added another 5 rigs in the basin during 1Q and has since brought on one additional rig, boosting its total Permian rig count to 15

operated and four non-operated rigs. APC plans to average 10-14 operated drilling rigs during the year and drill more than 150 operated wells. APC spud 51 wells and turned 21 to sales during 1Q17, supporting a ~9% QoQ increase in production to 54 MBoed (+46% YoY), including 31 MBbld of crude oil. *Assuming an 1,500 MBoe average EUR per well, we estimate APC's Delaware Wolfcamp position holds ~2.9 BBoe of net resource potential worth ~\$27/share to our NAV.*

- **Outside of the Wolfcamp A, APC also estimates 4,000+ drilling locations with EURs of 900-1,300+ MBoed in the Delaware Basin, bringing 1+ BBoe of potential upside to its resource estimate.** APC is evaluating the potential of Wolfcamp B, C, and D benches, and notes other operators on its offset acreage have been drilling in the Bone Spring and Avalon//Leonard zones.
- On the March Investor call, APC highlighted potential gas processing constraints in the Delaware Basin, but noted that its relationship with WES and large investment in midstream (\$560 million this year) will provide it an advantage.
- **In March, APC also increased the resource estimate for its DJ Basin position to 2+ BBoe from 1.5+ BBoe.** APC has 350,000 net acres prospective for the Niobrara in the core Wattenberg field. APC raised its Niobrara from type well EUR by ~15% to 560 MBoe and 385 MBoe for its wells in the core and extended areas, respectively. Similar to the change in the Delaware Basin, APC changed its DJ Basin type well from a 4,500-foot lateral SLE well to a 6,700-foot lateral MLE well, and raised its well cost to \$2.7 million for the new type well from the actual cost of \$2.1 million for a SLE well in 4Q16. Adjusting for lateral length, the new type curve economics benefit from a 14% reduction in well cost per horizontal lateral foot. Despite the longer lateral, APC has now identified 3,600+ and 900+ drilling locations for in the core and extended areas, respectively. APC picked up an additional rig in January, bringing its current total to 6 operated rigs; the company also exited 1Q with two completion crews active in the play. It plans to average 5-6 operated rigs and drill ~290 wells this year. APC spud 71 wells and turned 38 to sales during 1Q17, enabling a slight 1% YoY increase in net sales volumes to ~242 MBoed (although oil volumes declined 17% YoY to 79 MBbld oil). While we believe APC's Delaware Basin position has become at least as competitive as Wattenberg in generating attractive returns, both areas remain drivers of APC's long term oil growth. *Assuming a weighted average EUR of 525 MBoe average EUR per well, we estimate APC's Wattenberg acreage adds ~\$14.50/share to our NAV.*
- APC's production from the **Greater Natural Buttes** averaged 53 MBoed (~83% natural gas) in 1Q, down 5% QoQ and 24% YoY. The company dropped its only rig in the play during 1Q16.

### **Gulf of Mexico**

- **Gulf of Mexico** net sales volumes rose 51% QoQ to 159 MBoed, nearly double year-ago levels, largely reflecting production associated with the FCX

acquisition (closed on December 15) as well as strong performance from Caesar/Tonga and ramp-ups at Heidelberg and K2

- APC reached first oil at **Lucius** (49% w.i.) in January 2015; the seventh well came online during 3Q16 and enabled the field to reach average nameplate capacity of 80 MBbld during 4Q16. The eighth producing well is scheduled to spud this month with first production expected by year-end 2017. Along with the announcement it is acquiring FCX's deepwater Gulf of Mexico assets, APC raised its recoverable resource estimate for Lucius by 100 MMBoe to +400 MMBoe. We estimate the development adds ~59 MMBoe of net unbooked resource potential worth ~\$1.1 billion or \$2.00/share to NAV.
- At the **Heidelberg** field (44% w.i., post recent acquisition) in the **Gulf of Mexico**, first production commenced in January 2016 from three wells (ahead of original expectations for a 2Q16 start-up) and production from the field is now approaching 40 MBoed. The development's fourth producing well has reached its target rate of 13 MBoed while the fifth well is now online, currently producing 7 MBoed and expected to ramp to a peak rate of ~12 MBoed. APC estimates Heidelberg holds 200-400 MMBoe of gross resource potential (~116 MMBoe net including ~50 MMBoe unbooked); we value APC's stake in the unbooked resource potential at ~\$645 million, or ~\$1.15/share
- At the **Shenandoah** prospect (33% w.i.), the **Shenandoah-6** appraisal well and subsequent sidetrack well failed to establish oil-water contact on the eastern flank of the field and was declared a dry hole. Results from Shenandoah-6 were key to determining the field's true resource size and progressing towards a final investment decision; appraisal activity has been suspended as the partners evaluate future plans for the project. APC has written off the asset and we no longer ascribe value to it | our NAV.
- The company has stated that its **Gulf of Mexico tie back opportunities generate IRRs of >70% at ~\$60/Bbl WTI (and ~30% IRRs at ~\$30/Bbl)**, and has identified over 50 such opportunities (including recent acquisition) in the Gulf of Mexico. To that end, it has been named operator after reaching a co-development agreement on the **Constellation** prospect (33% interest). Development drilling will begin in 2Q17 with first production from 2-3 wells tied back to the Constitution spar expected in late 2018. We estimate the field can add 15-20 MBoed of gross production. APC is also evaluating a tie back opportunity at the **Warrior** prospect (65% working interest); it will drill an appraisal well later this quarter, which should dictate timing as to when it could be tied into the Marco Polo facility. Longer term, the **Phobos** prospect (100% working interest) can be tied back at the Lucius facility; however, that facility is currently running at capacity so any future tiebacks will have to await for capacity to become available.

## Ghana

- Jubilee** (APC 24.1% unitized w.i.) production averaged 82.5 MBbld gross during 1Q, up from 78 MBbld in 4Q. The Tullow Oil-operated Jubilee project is

located on both the Deepwater Tano block (18% w.i.) and West Cape Three Points block (31% w.i.) with total resource potential of 470-1,065 MMBbl gross.

- **The operator expects gross production from Jubilee to be ~68.5 MBbld (~16.5 MBbld net to APC) in 2017, which includes a facility shutdown of up to 12 weeks as previously disclosed.** As announced in February 2016, an issue was identified with the turret bearing of the FPSO which resulted in the need to implement new operating and offtake procedures, resulting in the shutdown of the FPSO for an extended period in April with production resuming in early May. At last update, Tullow noted that since then 18 offtakes to the storage tanker had been successfully completed using a dynamically positioned shuttle tanker. It continued to operate the field under these new procedures for the remainder of 2016.
- **For the long term, Tullow and its partners now see converting the FPSO to a permanently spread moored facility, with offtake through a new deepwater offloading buoy, as the preferred solution.** At last disclosure, the first phase of this work will involve the installation of a stern anchoring system to replace the three heading control tugs. The second phase of work will take place in 1H17 to rotate the FPSO to its optimal spread moor heading. These phases are expected to cost \$100-\$150 million and require the Jubilee FPSO to be shut-down for 8-12 weeks in 1H17. Upon completion of the spread mooring work in mid-2017, the partners will review opportunities to improve the efficiency, with additional gross operating expenditure of the revised procedures is expected to be ~\$115 million for 2016 and \$80 million for 2017. Finally, a deepwater offloading buoy is anticipated to be installed in the first half of 2018. While Tullow noted it has a comprehensive package of insurances, APC does not have insurance to cover the facility.
- The **Tweneboa-Enyenra-Ntomme ("TEN")** complex (17% w.i.), located ~30 km west of the Tullow-operated Jubilee Field, achieved first production in mid-August, on time and on budget three years after the Plan of Development was approved by the Government of Ghana in May 2013. It produced ~50 MBbld in 1Q (up from 46 MBbld in 4Q) and FPSO capacity of >80 MBbld was successfully tested during the quarter. WoodMackenzie estimates the TEN complex holds ~280 MMBoe of gross recoverable resource (August 2016 "TEN" report), near the low-end of operator Tullow Oil's 300-500 MMBoe estimate. We estimate the project adds ~\$1.25/share to APC's 2P NAV.
- Also in Ghana, at the **Mahogany/Teak/Akasa/Banda (MTAB) complex** on the West Cape Three Points block (31% working interest), APC and partners have filed a development plan to the government that would enable an expansion of the greater Jubilee area to include the MTAB field. While no details were provided, we expect the plan would extend plateau production from the Jubilee FPSO.

## Mozambique LNG

- **Management remains committed to Mozambique LNG, and continues to highlight that the timing of FID is subject to uncertainty regarding its legal and contractual framework, offtake agreements and project financing.**
- The critical steps to reaching FID and first production by the end of the decade are: 1) **approving a plan of development** – the Development Plan for the initial two-train Golfinho/Atum project was submitted to the Mozambique government during 4Q; 2) **converting its HOA off-take agreements to firm purchase & sales agreements** (already secured non-binding HOA for >8 MMTPA, but would like to have binding agreements for ~9-10 MMTPA); and 3) **securing project financing** (received indications of interest for 2/3 of the ~\$15 billion budget for the first two 6 MMTPA trains). APC estimates it could reach a Final Investment Decision by year end 2017 at the earliest . . . but more likely 2018. Upon reaching FID, first production should commence 4-5 years later.
- Management has highlighted that it has advanced all critical contracts with the Mozambique government. APC and ENI have jointly submitted the Resettlement Plan which is under review by the government of Mozambique. APC and its partners previously received third-party reserves certification for the Prosperidade complex which straddles the block with ENI's Mamba, as well as reserve certification for Golfinho/Atum which is located entirely on APC's block and large enough to supply Mozambique Train 1. APC has also completed the FEED project and selected a consortium (CB&I, Chiyoda Corporation and Saipem (CCS JV)) for the initial development of the onshore LNG park. It estimates its recoverable resource estimate is +75 Tcf on its Area 1 block (26.5% working interest).
- **In March, ExxonMobil (Sell) agreed to acquire from Eni (Buy) a 25% interest in the Area 4 block offshore Mozambique for \$2.8bn, providing a valuation marker for APC's 26.5% stake in the adjacent offshore Area 1.** While Area 1 contains the separate (from Area 4) Golfinho and Atum fields, we'd note it also consists of the Prosperidade complex which overlaps with ENI's Area 4 (Mamba). And in late 2015, APC and ENI reached a utilization agreement for the massive natural gas resources straddling the Prosperidade/Mamba reservoirs. Thus, we believe the deal between ENI and XOM highlights the value of Area 1 to APC. Assuming recoverable resource of 65 Tcfe in Area 1 (or ~16 Tcfe net to XOM), we estimate XOM is paying ~\$0.175/Mcfe, just below our estimate assumed for APC's stake in Area 1 of ~\$0.188/Mcfe. *As such, we've slightly reduced our estimated value for APC's 26.5% stake in Area 1 to ~\$3.5 billion (or \$6.30/share) from ~\$3.7 billion (or ~\$6.75/share).* Nonetheless, given APC holds an asset worth >\$3 billion that will not contribute to cash flow for several years while it trades at a ~1x turn discount to peers on 2018E EV/DACF, we believe the market is putting little to no value on its stake in Mozambique and the deal between XOM and ENI highlights APC's assets clearly has material value. That being

said, we also believe the market would prefer APC to sell some or its entire stake to pull value forward.

### Algeria

- Net sales from **Algeria** averaged 76 MBbld in 1Q17, up 7% YoY and flattish vs. 4Q16. Gross production averaged 374 MBoed during the quarter, down from its recent peak of 404 MBoed in 4Q16.

### Exploration Update

**APC maintains the most robust exploration program in the E&P sector, and has historically beaten annual resource targets prior to 2014.** APC is allocating ~\$650 million to exploration in 2017 to drill up to 10 exploration/appraisal wells in the deepwater Gulf of Mexico, Côte d'Ivoire, and Colombia. As a reminder, APC's 2015 and 2016 exploration programs (~\$600 million and ~\$400 million) targeted >700 MMBoe and 250 MMBoe of resource additions, respectively. In 2014, APC's exploration program targeted >600 MMBoe of resource additions from the ~\$800 million in capital allocated to its exploration program, but discovered a disappointing ~200 MMBoe. However, we'd note that in previous years APC had consistently beaten its annual resource targets by a healthy margin (see Figure 8 below).

- APC's exploration program has been so efficient at discovering large-scale resource at a low cost that it has been able to monetize a portion of its discoveries to effectively fund its efforts.** From 2006-15, APC discovered ~6.5 BBoe of resource with a capital program of ~\$10 billion, for an impressive finding cost of ~\$1.50/Boe. Over that same time period, it has monetized ~\$14 billion of assets, but still has ~5 BBoe of these discoveries under development with ~250 MBoed of net production. In other words, APC's exploration program has effectively been self-funding as it generated so much resource addition that it was able to divest assets that generated value (proceeds and carried interests) in excess of its exploration capex over that time period.

**Figure 8: APC's Historical Resource Adds from Exploration vs. Annual Targets**

(in MMBoe)	Resource Target	Actual Resource Discovered	% of Target Achieved
2009	200	357	179%
2010	400	650+	163%
2011	500+	730	146%
2012	800+	1,500+	188%
2013	800+	900+	113%
2014	600+	~200	33%
2015	700+	?	?
2016	250	?	?

Source: Company documents

We outline APC's near term exploration and appraisal activity in each region below:

- In the **deepwater Gulf of Mexico** APC drilled an exploration well at the **Calpurnia** prospect and plans to drill 4-5 appraisal wells this year.
  - APC announced the **Calpurnia** exploration well (76.45% w.i.) spud in December encountered 60 net feet of oil pay in Miocene-aged sands. **Calpurnia** is located near the APC-operated Caesar-Tonga, Heidelberg, and Holstein fields. The wellbore was temporarily abandoned and is expected to be used for future production as a tieback to one of the nearby operated facilities.
  - APC announced it mid-December that its **Warrior** prospect (65% w.i.) encountered >210 net feet of oil pay in multiple high-quality Miocene-aged reservoirs. The **Warrior** discovery is located approximately 3 miles from the Anadarko-operated K2 field and is expected to be tied back to its Marco Polo production facility. An appraisal well is planned to spud in 2Q17, with results helping dictate the timing of when the prospect would be tied back to Marco Polo.
  - After completing operations on the **Warrior** exploration well, the rig spud the **Shenandoah-6** appraisal well in December and subsequently drilled a sidetrack, but the well did not encounter the oil-water contact on the eastern flank of the field, which was expected to further quantify the full resource potential. APC has currently suspended appraisal activity at **Shenandoah** (33% w.i.) while it evaluates the path forward (likely to either divest or abandon given challenged economics in a ~\$50/Bbl environment).
  - Also in the Shenandoah Basin, a second appraisal well (**Coronado-3**) is planned at the Chevron-operated Coronado discovery (APC 35% w.i.). In March 2013, CVX announced a discovery at the Coronado prospect, which encountered more than 400 feet of net pay in the Inboard Lower Tertiary trend. However, in 2Q14, the initial appraisal well did not find the Lower Miocene objective and was plugged and abandoned.
  - APC also plans to drill a second appraisal well (**Phobos-3**) at its 2013 **Phobos** discovery (100% w.i.), where it drilled an appraisal well at and encountered >90 net feet of high-quality oil pay in the secondary objective Pliocene-aged reservoir (announced in mid-December) and ~130 net feet of oil pay in a Wilcox-aged reservoirs (the primary objective). Located ~12 miles south of the Lucius spar, **Phobos** is being evaluated as a potential tieback to **Lucius** in order to hold volumes at that facility flat; however, with **Lucius** still at capacity, **Phobos** is unlikely to be tied back to the facility anytime soon.
- On the Grand Fuerte block (50% w.i.) offshore **Colombia**, APC announced in March a natural gas discovery at the **Purple Angel-1** exploration well which was designed to test objectives similar to those at APC's play-opening **Kronos** discovery. The well encountered 70-110 feet of gas pay although we expected APC to be targeting oil at **Purple Angel**. For reference, the 2015 **Kronos**

discovery on the block encountered 130-230 net feet of gas pay in the upper objective and proved a working hydrocarbon system. Subsequently to the end of 1Q, APC made its third discovery offshore Colombia at the **Gorgon** prospect located ~17 miles north/northeast of Purple Angel-1. The well encountered between 260 - 360 feet of gas pay. This is APC's third gas discovery in Colombia, a geologic success but likely a commercial failure as it seeks to find oil. In the **Grand Col** area (100% w.i.), the entire 30,000km<sup>2</sup> Esmeralda 3D survey was complete during 3Q16, and APC is preparing to evaluate potential drilling locations for possible operations in 2018. Overall, APC has ~16 million gross acres offshore Colombia so any success should increase enthusiasm for follow-on potential. And given APC's high working interest in Colombia, any discoveries that reach the development stage would be candidates for the successful JV/carry agreements it used to develop Lucius and Heidelberg in the deepwater Gulf of Mexico.

- Offshore **West Africa** in **Cote d'Ivoire**, APC plans to drill 1-3 exploration/appraisal wells this year. APC plans to spud another appraisal well at its Paon discovery in May (**Paon-6A**, 65% w.i.) to test the updip extent of the oil accumulation in the "South Channel" of the discovery, with a contingent drillstem and interference test planned for late 2017. For reference, APC previously disclosed that it successfully drilled the **Paon-3A** horizontal sidetrack and encountered ~120 net feet of pay. Following the previously completed Paon-3AR and Paon-4A wells, APC's Paon-5A appraisal well encountered nearly 100 net feet of vertical pay during 1Q16. During 3Q16, a drillstem test was also complete at Paon-5A. With equipment-limited maximum stable flow rates at 9 MBbl/d and 21 MMcf/d, the results met deliverability expectations, and the ongoing interference test has confirmed reservoir connectivity. At last update, the partners had begun evaluating development options for the field with project sanction possibly in 1H17 with the next step largely dependent on securing an adequate natural gas offtake contract. Given APC's 65% interest in Paon, we expect APC to try to reduce its working interest by bringing in a third party to fund a significant portion of APC's share of the development. On the exploration front, following Paon-6A, APC plans to drill an exploration well at each of the two opportunities, the **Gendarme** and **Colibri** prospects (90% w.i.), adjacent to its discoveries at the **Pelican** prospect in **Block CI-527** and the **Rossignol** prospect in **Block CI-528** (90% w.i. for both blocks) in 3Q16.

**Figure 9: APC's Exploration Calendar**

Region	Prospect	Working Interest	Spud Date
Gulf of Mexico	Warrior-2 appraisal	65%	2017
Gulf of Mexico	Phoenix-3 appraisal	65%	2017
Gulf of Mexico	Coronado-3 appraisal	35%	2017
Cote d'Ivoire	Paon-6A appraisal	65%	May, 2017
Cote d'Ivoire	Gendarme	90%	2017
Cote d'Ivoire	Colibri	90%	2017

Source: UBS estimates and company data

## First Quarter Results Review

- **Clean 1Q17 EPS loss of (\$0.60) was much wider than UBSe of (\$0.28) and consensus of (\$0.24).** Relative to UBSe, the miss was driven entirely by a much higher than expected exploration expense vs. our estimate due to the dry hole at Shenandoah-6, impacting EPS by >\$0.30/share.
- **CFPS of \$1.84 missed consensus of \$1.99 and UBSe of \$2.11.** EBITDX of ~\$1.66 billion rose 126% YoY and was above both consensus and UBSe of ~\$1.47 billion and ~\$1.62 billion, respectively.
- **Companywide sales volumes declined 4% YoY to 795 MBoed, comfortably above the "adjusted" guidance range of 779-801 MBoed (including production from divested assets) but slightly below UBSe of 801 MBoed.** Liquids comprised ~61% of companywide production, above the year ago level of ~54%. Adjusting for asset sales, production was 672 MBoed, in the upper half of the 656-678 MBoed guidance range.
- **Realized commodity prices surged 72% YoY and were 1% above our forecast.** Crude realizations rose 54% YoY to \$50.38/Bbl, NGL realizations surged 74% YoY to \$26.93/Bbl, and natural gas realizations rose 65% YoY to \$2.98/Mcf.
- **Aggregate pre-tax per-unit costs rose 29% YoY to \$6.57/Mcfe, 9% above our forecast entirely driven by the higher than expected exploration expense.** APC's 1Q per unit cost is also well above the estimated peer average of \$5.66/Mcfe.
- **Adjusted GPM income** of \$91 million more than tripled from the year ago \$29 million and exceeded our \$80 million forecast and the \$75-\$85 million guidance range.
- The figure below provides the primary factors impacting APC's 1Q17 EPS and CFPS results, as well as outlining the differences between results and our estimates.

Figure 10: Anadarko Petroleum First Quarter Statistical Summary

	First Quarter Results			Results vs. Estimates			Consensus
	1Q17	1Q16	% Change	1Q17A	1Q17E	% Change	
<b>Production Volumes:</b>							
Natural Gas (Bcf)	167.3	209.6	-19%	167.3	166.9	0%	137.7
Crude Oil (MMBbls)	33.0	28.7	+11%	33.0	33.3	+1%	32.6
Natural Gas Liquids (MMBbls)	10.6	11.6	-9%	10.6	10.9	+3%	10.4
Total (Boe)	429.2	451.5	-4%	429.2	432.3	+1%	396.4
Total (MBoe)	794.8	826.8	-4%	794.8	800.6	+1%	734.0
<b>Prices:</b>							
Natural Gas (\$/Mcfe)	\$2.98	\$1.81	+65%	\$2.98	\$3.02	+1%	\$3.09
Crude Oil (\$/Bbl)	50.38	32.72	+54%	50.38	49.21	-2%	50.30
Natural Gas Liquids (\$/Bbl)	26.93	15.50	+74%	26.9	26.6	-1%	23.81
Total (\$/Mcfe) (a)	\$5.70	\$3.32	+72%	\$5.70	\$5.63	1%	
<b>B&amp;P Unit Costs (\$/Mcfe):</b>							
Lifting Cost	\$0.60	\$0.46	+30%	\$0.60	\$0.53	+13%	
Transportation	0.58	0.54	+8%	0.58	0.60	+3%	
Administrative and General	0.63	0.54	+15%	0.63	0.65	+4%	
DD&A	2.60	2.55	+2%	2.60	2.65	+2%	
Exploration Expense	1.29	0.28	+352%	1.29	0.68	+89%	
Interest	0.52	0.49	+7%	0.52	0.51	-2%	
Production Taxes (% of Rev)	6.3%	7.8%	-19%	6.3%	7.0%	+10%	
Total	\$6.57	\$5.11	+29%	\$6.57	\$6.01	+9%	
		2.69					
Pre-Tax Income Per Mcfe	(\$0.87)	(\$1.80)	-51%	(\$0.87)	(\$0.38)	+126%	
Cash Flow Per Mcfe	\$2.36	\$0.86	+174%	\$2.36	\$2.69	+12%	
Earnings Per Share	(\$0.60)	(\$1.12)	-47%	(\$0.60)	(\$0.28)	+113%	(\$0.24)
Cash Flow Per Share	\$1.84	\$0.76	+141%	\$1.84	\$2.11	+13%	\$1.99
EBITDA	\$1,659	\$733	+126%	\$1,659	\$1,615	-3%	\$1,466

Source: Company documents and UBS estimates.

Figure 11: APC's Production, Price Realizations, and Per-Unit Costs (2014-2021E)

	2014	2015	2016	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
<b>Production Volumes:</b>														
Natural Gas (Bcf)														
U.S.	846.1	862.0	209.5	195.1	194.1	173.1	796.0	167.8	111.0	98.0	100.5	498.5	411.7	399.4
Canada														
Other International														
Natural Gas Total (Bcf)	945.1	882.0	209.6	192.1	184.3	173.1	796.0	167.8	111.0	98.0	100.5	498.5	411.7	399.4
Crude Oil (MMBbls)														
U.S.	73.9	84.0	21.1	20.7	21.0	22.1	86.3	24.0	22.9	25.5	26.5	101.1	121.9	140.6
Alaska														
Algeria	24.1	21.6	4.9	5.4	8.0	6.8	23.6	6.3	5.0	5.1	5.1	22.1	22.1	22.1
Canada														
Other International														
Crude Oil Total (MMBbls)	100.3	116.6	21.7	26.9	29.2	30.8	116.7	25.0	27.5	21.1	23.3	98.6	122.7	152.7
Natural Gas Liquids (MMBbls)														
U.S. & Canada	42.6	46.1	11.1	11.5	11.2	10.7	44.6	10.8	8.8	8.2	8.0	34.8	39.0	42.9
Algeria	1.1	2.2	0.5	0.5	0.6	0.3	2.4	0.5	0.5	0.5	0.5	2.1	2.0	1.9
Natural Gas Liquids Total (MMBbls)	43.7	47.3	11.6	11.9	11.8	11.4	46.8	10.8	8.8	8.2	8.0	36.9	41.0	44.8
<b>Prices:</b>														
Natural Gas (\$/Mcf)														
U.S. (NYMEX Henry Hub)	\$4.45	\$2.87	\$2.09	\$1.86	\$2.81	\$2.88	\$2.46	\$3.22	\$3.26	\$3.00	\$3.25	\$3.50	\$3.00	\$2.26
U.S. Forecast (Henry Hub)	\$3.98	\$2.72	\$1.81	\$1.74	\$1.70	\$1.70	2.06	\$2.85	\$2.95	\$2.79	\$2.95	\$2.80	\$2.66	\$2.90
U.S.														
Canada														
Other International														
Differences to NYMEX Henry Hub														
United States	\$3.98	\$2.72	\$1.81	\$1.92	\$2.35	\$2.95	\$2.09	\$2.93	\$2.95	\$2.70	\$2.95	\$2.90	\$2.65	\$2.80
Canada														
Crude Oil (\$/Bbl)														
UBS Forecast (WTI)	\$42.89	\$49.81	\$33.84	\$46.59	\$44.82	\$49.16	\$43.36	\$61.77	\$66.60	\$60.60	\$62.00	\$67.50	\$63.00	\$69.00
UBS Forecast (Brent)	\$39.38	\$60.07	\$36.32	\$47.41	\$47.46	\$51.36	\$46.69	\$56.11	\$67.60	\$62.50	\$64.00	\$68.80	\$65.00	\$70.00
U.S.	91.4	46.1	\$2.53	43.15	44.36	45.12	42.0	49.20	53.00	57.52	58.14	64.8	60.6	65.5
Algeria														
Canada														
Other International														
Crude Oil Total (\$/Bbl)	\$36.02	\$48.84	\$22.02	\$43.99	\$44.75	\$41.10	\$42.64	\$50.11	\$51.17	\$51.17	\$50.13	\$66.40	\$61.00	\$68.96
U.S.														
Algeria														
Canada														
Differences to NYMEX WTI														
U.S.	39%	38%	45%	42%	47%	49%	46%	51%	49%	49%	48%	50%	50%	51%
Algeria	73%	62%	61%	53%	50%	50%	50%	72%	73%	73%	73%	73%	73%	73%
Canada														
Other International														
Crude Oil Total (\$/Bbl)	36.08	47.96	15.50	19.55	19.04	24.63	19.66	25.93	21.99	30.40	31.33	29.02	31.92	36.01
Differences to NYMEX WTI														
U.S.	39%	38%	45%	42%	47%	49%	46%	51%	49%	49%	48%	50%	50%	51%
Algeria	73%	62%	61%	53%	50%	50%	50%	72%	73%	73%	73%	73%	73%	73%
Canada														
Other International														
Crude Oil Total (\$/Bbl)	36.08	47.96	15.50	19.55	19.04	24.63	19.66	25.93	21.99	30.40	31.33	29.02	31.92	36.01
Production Costs (\$/Bbl)														
Lubric Cst	\$0.64	\$0.65	\$0.46	\$0.47	\$0.48	\$0.48	\$0.47	\$0.60	\$1.10	\$0.70	\$0.70	\$0.67	\$0.70	\$0.70
Transport	0.64	0.62	0.54	0.57	0.59	0.60	0.68	0.58	0.55	0.55	0.58	0.68	0.68	0.68
Administrativ and General	0.17	0.17	0.14	0.15	0.15	0.15	0.10	0.05	0.05	0.05	0.05	0.04	0.04	0.04
CO2	2.47	2.61	2.09	2.26	2.46	2.11	2.47	2.60	3.05	3.05	3.05	2.02	3.00	3.00
Exploration Expense	0.76	0.63	0.24	0.18	0.21	0.09	0.46	1.29	0.50	0.55	0.55	0.85	0.80	0.80
Amortization of Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Taxes (% of Rev.)	6.0%	6.4%	7.7%	6.0%	7.5%	5.1%	7.2%	8.2%	7.0%	6.5%	6.5%	6.8%	6.8%	6.8%
Production Taxes (% of Rev.) - in Algeria	8.8%	7.1%	7.5%	5.5%	5.1%	5.1%	5.1%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

Source: UBS estimates and Company documents

Figure 12: APC's Income Statement and Discretionary Cash Flow (2014-2021E)

(Millions, except per share data)	2014	2016	2016				2017E				2018E				2020E		2021E	
			1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	2020E	2021E
<b>Revenues:</b>																		
Natural Gas Sales	\$3,764	\$2,319	\$3,719	\$222	\$523	\$613	\$1,577	\$498	\$1356	\$289	\$267	\$1,419	\$1,091	\$1,168	\$1,122	\$1,000		
Oil and Condensate Sales	10,204	6,426	938	1,165	1,305	1,403	4,921	1,664	1,810	1,195	2,178	2,360	9,310	11,398	12,969	13,841		
Natural Gas Liquids	1,676	960	180	233	234	26	281	216	262	268	267	1,071	1,269	1,669	1,712	1,588		
Other	78	292	28	34	56	71	179	85	45	45	200	200	200	200	200	200		
Energy Hedges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>\$16,021</b>	<b>\$9,887</b>	<b>\$1,525</b>	<b>\$1,774</b>	<b>\$2,070</b>	<b>\$2,256</b>	<b>\$7,867</b>	<b>\$2,513</b>	<b>\$2,303</b>	<b>\$2,448</b>	<b>\$2,737</b>	<b>\$10,050</b>	<b>\$11,918</b>	<b>\$14,326</b>	<b>\$16,634</b>	<b>\$16,949</b>		
<b>Costs and Expenses:</b>																		
Drill Cost	(61,172)	(41,014)	(528)	(329)	(816)	(1205)	(6015)	(228)	(341)	(529)	(525)	(51,122)	(51,182)	(41,150)	(41,226)	(41,267)		
Transportation	(11,386)	(11,350)	(554)	(548)	(256)	(256)	(15,003)	(534)	(300)	(520)	(513)	(10,774)	(10,715)	(10,680)	(10,650)	(10,592)		
Administrative and General	(1,316)	(1,211)	(24)	(25)	(255)	(224)	(1,061)	(246)	(269)	(1749)	(257)	(1,044)	(1,070)	(1,091)	(1,139)	(1,171)		
DD&A	(4,560)	(4,032)	(1,148)	(1,041)	(1,056)	(1,056)	(4,201)	(7,115)	(11,031)	(11,031)	(11,197)	(4,389)	(4,722)	(5,116)	(5,444)	(5,867)		
Exploration expense	(1,411)	(779)	0	120	176	304	(251)	(767)	(503)	(177)	(195)	(202)	(1,127)	(1,022)	(1,053)	(914)	(978)	
Amortization of Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Production Taxes	(1,246)	(862)	(117)	(157)	(148)	(114)	(636)	(155)	(156)	(159)	(175)	(547)	(770)	(928)	(1,014)	(1,152)		
Asset Production Tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prov for impairment of prop/deferred accs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>(10,886)</b>	<b>(10,364)</b>	<b>(1,014)</b>	<b>(1,122)</b>	<b>(2,225)</b>	<b>(2,261)</b>	<b>(10,408)</b>	<b>(2,599)</b>	<b>(2,340)</b>	<b>(2,341)</b>	<b>(2,222)</b>	<b>(8,103)</b>	<b>(8,662)</b>	<b>(10,170)</b>	<b>(10,008)</b>	<b>(11,605)</b>		
<b>EBIT Operating Income</b>	<b>\$4,736</b>	<b>(54,117)</b>	<b>(10,553)</b>	<b>(1,148)</b>	<b>(2,055)</b>	<b>\$5</b>	<b>(5001)</b>	<b>(546)</b>	<b>\$113</b>	<b>\$355</b>	<b>\$514</b>	<b>\$347</b>	<b>\$2,316</b>	<b>\$4,156</b>	<b>\$4,749</b>	<b>\$6,362</b>		
Interest Income																		
S&P Marketing & Transportation Income	\$198	\$177	529	657	559	810	\$215	\$9	\$105	\$105	\$108	\$406	\$426	\$400	\$626	\$581		
S&P G&A	80	90	50	50	50	50	80	10	80	80	10	80	80	80	80	80		
Net Interest Expense	(975)	(805)	(120)	(137)	(220)	(222)	(880)	(5223)	(723)	(723)	(723)	(6862)	(1019)	(8690)	(8690)	(8690)		
Other Income	(519)	(113)	(518)	(518)	(521)	(521)	(806)	(514)	(10)	(10)	(10)	(514)	(546)	(103)	(125)	(125)		
<b>EBITDA Income</b>	<b>\$4,169</b>	<b>(51,000)</b>	<b>(10,962)</b>	<b>(1,316)</b>	<b>(2,016)</b>	<b>(6407)</b>	<b>(1,794)</b>	<b>(1,864)</b>	<b>(5232)</b>	<b>\$45</b>	<b>\$238</b>	<b>\$306</b>	<b>\$487</b>	<b>\$1,816</b>	<b>\$3,716</b>	<b>\$4,381</b>	<b>\$4,993</b>	
Interest Taxes																		
Tax Rate	45%	23%	30%	39%	7%	-17%	19%	35%	35%	37%	37%	30%	37%	37%	37%	37%		
Income from Equity Method	\$187	\$101	\$36	\$61	\$83	\$123	\$263	\$41	\$95	\$95	\$95	\$238	\$266	\$266	\$266	\$266		
<b>Net Income</b>	<b>\$2,084</b>	<b>(1,019)</b>	<b>(571)</b>	<b>(104)</b>	<b>(146)</b>	<b>(272)</b>	<b>(10,000)</b>	<b>(5339)</b>	<b>(514)</b>	<b>\$102</b>	<b>\$204</b>	<b>(167)</b>	<b>\$180</b>	<b>\$2,062</b>	<b>\$2,406</b>	<b>\$2,821</b>		
<b>EPS</b>	<b>\$4.13</b>	<b>(2.01)</b>	<b>(1.12)</b>	<b>(0.80)</b>	<b>(0.59)</b>	<b>(0.62)</b>	<b>(10,000)</b>	<b>(10,66)</b>	<b>(10,66)</b>	<b>\$0.19</b>	<b>\$0.37</b>	<b>(10,19)</b>	<b>\$1.86</b>	<b>\$1.66</b>	<b>\$4.26</b>	<b>\$4.86</b>		
EPS (Basic) - Basic (millions)	606	607	209.4	310.5	511.0	511.0	529.8	551.0	552.4	552.4	554.4	563.1	565.9	563.9	564.9	565.9		
EPS (Basic) - Diluted (millions)	607	609	209.0	310.0	511.0	511.0	521.8	561.0	563.4	563.4	564.4	563.8	567.4	561.4	566.4	569.4		
<b>Share Repurchase Worksheet:</b>																		
<b>Discretionary Cash Flow:</b>																		
(Millions, except per share data)	2014	2016	2016				2017E				2018E				2020E		2021E	
			1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	2020E	2021E
<b>Net Income Before Preferred</b>	<b>\$2,084</b>	<b>(1,019)</b>	<b>(1571)</b>	<b>(1504)</b>	<b>(1461)</b>	<b>(1273)</b>	<b>(10,000)</b>	<b>(5330)</b>	<b>(5134)</b>	<b>\$102</b>	<b>(104)</b>	<b>(107)</b>	<b>\$308</b>	<b>\$2,062</b>	<b>\$2,405</b>	<b>\$2,821</b>		
D/D & L	4,666	4,603	1,149	954	1,069	1,059	4,301	1,115	1,081	1,033	1,119	4,363	4,723	6,116	6,484	5,887		
Amortization of Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dividend Tax	1,320	(1,190)	(100)	(174)	(29)	(30)	(400)	0	0	3	16	57	381	756	911	1,029		
Dividend Tax - as a percentage	10.2%	-17.2%	55.7%	167.1%	100.7%	-10.0%	18.2%	0.0%	25.0%	25.0%	25.0%	10.8%	54.4%	54.4%	54.4%	54.4%		
Amortization of Rest. Stock	0	0	0	4	4	4	16	4	4	4	4	15	18	18	18	18		
Interest expense - zero coupon bonds	16	16	4	4	4	4	16	4	4	4	4	15	18	18	18	18		
Impairment of Int'l Prop	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Exploration Expense	1,246	2,267	35	10	255	113	619	250	124	137	141	662	667	666	666	636		
Other (Int'l Exploration - as a percentage)	2%	21%	20%	13%	34%	10%	77%	-45%	70%	70%	70%	58%	61%	65%	65%	65%		
Capitalized Interest	(108)	(162)	(36)	(42)	(31)	(30)	(121)	(25)	(15)	(15)	(15)	(130)	(148)	(150)	(150)	(164)		
Capitalized G&A																		
Other																		
<b>Total</b>	<b>\$9,021</b>	<b>\$4,506</b>	<b>\$183</b>	<b>\$476</b>	<b>\$307</b>	<b>\$1,094</b>	<b>\$2,767</b>	<b>\$1,014</b>	<b>\$1,144</b>	<b>\$1,305</b>	<b>\$1,281</b>	<b>\$1,927</b>	<b>\$6,484</b>	<b>\$6,338</b>	<b>\$9,270</b>	<b>\$10,193</b>		
<b>Cash Flow Per Share</b>	<b>\$17.83</b>	<b>\$9.87</b>	<b>\$0.76</b>	<b>\$0.94</b>	<b>\$1.56</b>	<b>\$1.95</b>	<b>\$6.30</b>	<b>\$1.24</b>	<b>\$2.07</b>	<b>\$2.26</b>	<b>\$2.63</b>	<b>\$0.80</b>	<b>\$11.66</b>	<b>\$16.40</b>	<b>\$17.90</b>			

Source: UBS estimates and Company documents

Figure 13: APC's Cash Flow Statement and Balance Sheet (2014-2021E)

	2014	2015	1Q-16A	2Q-16A	3Q-16A	4Q-16A	2016	1Q-17A	2Q-17A	3Q-17A	4Q-17A	2017E	2018E	2019E	2020E	2021E
<b>Cash Flows From Operations</b>																
Net Income	(\$1,583)	(\$6,612)	(\$596)	(\$611)	(\$747)	(\$452)	(\$2,808)	(\$275)	(\$34)	\$102	\$204	(\$2)	\$538	\$2,052	\$2,405	\$2,621
DDSA	4,550	4,603	1,149	984	1,069	1,069	4,301	1,115	1,081	1,063	1,119	4,380	4,723	5,115	5,484	5,657
Amortization of Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deferred Taxes	(105)	(3,152)	(413)	(407)	(301)	(117)	(1,236)	(660)	3	18	32	(607)	381	755	911	1,029
Exploration	1,245	2,267	35	10	255	313	613	1,012	124	137	141	1,414	867	556	596	636
Impairments	835	5,075	16	18	27	165	227	373	0	0	0	373	0	0	0	0
Other	(985)	1,577	517	887	555	54	1,815	(578)	4	4	4	(865)	15	15	15	15
Discretionary Cash Flow	\$3,977	\$3,586	\$306	\$681	\$685	\$1,063	\$2,908	\$686	\$1,179	\$1,343	\$1,501	\$4,712	\$6,624	\$8,493	\$9,410	\$10,358
Working Capital Changes	4,486	5,433	(443)	548	(73)	80	82	434	0	0	0	434	0	0	0	0
<b>Cash Provided by Operations</b>	<b>\$8,466</b>	<b>(\$1,877)</b>	<b>(\$137)</b>	<b>\$1,226</b>	<b>\$785</b>	<b>\$1,123</b>	<b>\$3,000</b>	<b>\$1,123</b>	<b>\$1,179</b>	<b>\$1,343</b>	<b>\$1,501</b>	<b>\$5,148</b>	<b>\$6,624</b>	<b>\$8,493</b>	<b>\$9,410</b>	<b>\$10,358</b>
<b>Cash Flows From Investing</b>																
Capital Expenditures	(\$9,508)	(\$6,667)	(\$1,022)	(\$857)	(\$739)	(\$887)	(\$3,505)	(\$1,194)	(\$1,383)	(\$1,433)	(\$1,575)	(\$5,584)	(\$6,230)	(\$7,430)	(\$7,930)	(\$7,830)
Acquisition Costs	(\$1,527)	(\$3)	0	0	0	0	1740.0	(\$1,740)	0.0	0.0	0.0	0	0	0	0	0
Net Proceeds From Asset Sales	4,968	1,416	35	865	381	1,075	2,356	2,851	200	0	0	3,051	0	0	0	0
Other	-105	-116	14	0	67	45	127	65	0	0	0	55	0	0	0	0
<b>Cash Provided (Used In) Investing</b>	<b>(\$6,472)</b>	<b>(\$1,771)</b>	<b>(\$973)</b>	<b>58</b>	<b>(\$291)</b>	<b>(\$1,506)</b>	<b>(\$2,702)</b>	<b>\$1,722</b>	<b>(\$1,183)</b>	<b>(\$1,433)</b>	<b>(\$1,575)</b>	<b>(\$2,468)</b>	<b>(\$6,230)</b>	<b>(\$7,430)</b>	<b>(\$7,930)</b>	<b>(\$7,830)</b>
<b>Cash Flows From Financing</b>																
Increase in Long Term Debt	\$2,879	\$4,632	4862.0	583.0	585.0	202.0	\$6,042	0.0	14.3	151.7	89.8	\$256	\$0	\$0	\$0	\$0
Repayment of Long Term Debt	(1,425)	(4,033)	(\$1,608)	(\$3,817)	(\$596)	(\$809)	(\$6,832)	(\$10)	\$0	\$0	\$0	(10)	(203)	(682)	(1,001)	(1,688)
Issuance of Preferred Stock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Equity Issuions	121	34	30	0	2,158	0	2,188	0	52	0	52	104	123	123	123	123
Equity Repurchase	(45)	(59)	(30)	(1)	(1)	(6)	(28)	(21)	0	0	0	(21)	0	0	0	0
Dividends Paid	(505)	(553)	(25)	(26)	(27)	(27)	(108)	(28)	(28)	(28)	(28)	(111)	(111)	(123)	(123)	(125)
Other	650	195	70	461	(5)	227	753	(120)	0	0	0	(138)	0	0	0	0
<b>Net Cash Used In Financing</b>	<b>\$1,675</b>	<b>\$220</b>	<b>\$3,119</b>	<b>(\$2,790)</b>	<b>\$2,092</b>	<b>(\$413)</b>	<b>\$2,098</b>	<b>(\$5196)</b>	<b>\$39</b>	<b>\$124</b>	<b>\$114</b>	<b>\$79</b>	<b>(\$106)</b>	<b>(\$681)</b>	<b>(\$1,006)</b>	<b>(\$1,700)</b>
<b>Effect of Exchange Rate Change</b>	<b>2</b>	<b>(2)</b>	<b>-1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Change in Cash</b>	<b>3,671</b>	<b>(6,430)</b>	<b>2,008</b>	<b>(1,563)</b>	<b>2,586</b>	<b>(766)</b>	<b>2,245</b>	<b>2,647</b>	<b>35</b>	<b>35</b>	<b>40</b>	<b>2,757</b>	<b>198</b>	<b>382</b>	<b>474</b>	<b>728</b>
<b>Cash at Beginning of Period</b>	<b>2,098</b>	<b>7,369</b>	<b>939</b>	<b>2,947</b>	<b>1,394</b>	<b>3,980</b>	<b>939</b>	<b>3,184</b>	<b>5,831</b>	<b>5,866</b>	<b>5,901</b>	<b>3,184</b>	<b>5,941</b>	<b>6,138</b>	<b>6,521</b>	<b>6,994</b>
<b>Cash at End of Period</b>	<b>7,369</b>	<b>939</b>	<b>2,947</b>	<b>1,394</b>	<b>3,980</b>	<b>3,184</b>	<b>3,184</b>	<b>5,831</b>	<b>5,866</b>	<b>5,901</b>	<b>5,941</b>	<b>6,138</b>	<b>6,521</b>	<b>6,994</b>	<b>7,722</b>	
	14779.2															
	2014	2015	1Q-16A	2Q-16A	3Q-16A	4Q-16A	2016	1Q-17A	2Q-17A	3Q-17A	4Q-17A	2017E	2018E	2019E	2020E	2021E
<b>Assets</b>																
Current Assets	\$11,221	\$3,982	\$5,787	\$3,212	\$5,818	\$5,266	\$5,266	\$7,707	\$7,742	\$7,777	\$7,817	\$7,817	\$8,015	\$8,387	\$8,871	\$9,568
Property Plant and Equipment	41,589	33,761	33,525	32,345	31,099	32,168	29,065	28,042	29,255	29,569	29,569	30,401	32,168	34,016	35,454	
Goodwill	6,569	6,631	6,325	6,237	6,197	5,604	5,904	5,739	5,739	5,739	5,739	5,739	5,739	5,739	5,739	
Deferred Charges & Other	2,310	2,350	2,304	2,239	2,213	2,226	2,226	2,182	2,182	2,182	2,182	2,182	2,182	2,182	2,182	
<b>Total Assets</b>	<b>\$61,089</b>	<b>\$46,414</b>	<b>\$47,922</b>	<b>\$44,033</b>	<b>\$45,417</b>	<b>\$45,584</b>	<b>\$45,584</b>	<b>\$44,693</b>	<b>\$44,705</b>	<b>\$44,933</b>	<b>\$45,307</b>	<b>\$45,307</b>	<b>\$46,344</b>	<b>\$48,485</b>	<b>\$50,009</b>	<b>\$52,974</b>
<b>Liabilities and Stockholders Equity</b>																
Current Liabilities	\$10,234	\$4,181	\$6,657	\$3,244	\$3,782	\$3,326	\$3,326	\$3,762	\$3,762	\$3,762	\$3,762	\$3,762	\$3,762	\$3,762	\$3,762	
Long-Term Debt	15,002	15,718	15,726	15,641	15,060	15,281	15,281	15,284	15,298	15,450	15,540	15,540	15,337	14,655	13,654	11,965
Other Long Term Liabilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deferred Taxes	8,248	5,400	4,940	4,686	4,343	4,324	4,324	3,694	3,667	3,685	3,717	3,717	4,067	4,853	5,763	6,792
Other Deferred	4,786	5,658	5,658	5,652	6,310	7,134	7,134	6,004	6,908	6,912	6,915	6,915	6,930	6,945	6,960	6,975
Preferred Stock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stockholders Equity	22,310	15,457	14,701	14,600	15,912	15,497	15,497	15,079	15,070	15,144	15,373	15,373	16,218	18,270	20,670	23,479
<b>Total</b>	<b>\$61,089</b>	<b>\$46,414</b>	<b>\$47,922</b>	<b>\$44,033</b>	<b>\$45,417</b>	<b>\$45,584</b>	<b>\$45,584</b>	<b>\$44,693</b>	<b>\$44,705</b>	<b>\$44,933</b>	<b>\$45,307</b>	<b>\$45,307</b>	<b>\$46,344</b>	<b>\$48,485</b>	<b>\$50,009</b>	<b>\$52,974</b>
<b>Net Debt</b>	<b>\$14,105.0</b>	<b>\$15,917.0</b>	<b>\$16,616.0</b>	<b>\$15,673.0</b>	<b>\$12,934.0</b>	<b>\$13,343.0</b>	<b>\$13,343.0</b>	<b>\$11,338.0</b>	<b>\$11,318.3</b>	<b>\$11,435.1</b>	<b>\$11,484.8</b>	<b>\$11,484.8</b>	<b>\$11,084.0</b>	<b>\$10,020.0</b>	<b>\$8,545.0</b>	<b>\$6,128.6</b>
Net Debt/Capitalization (Year End)	36%	51%	55%	52%	42%	43%	43%	37%	37%	37%	37%	37%	35%	30%	25%	17%
Net Debt/EBITDX (Year End)	1.3x	3.1x						3.1x					1.7x	1.5x	0.9x	0.7x
Debt/EBITDX	1.3x	3.0x						3.6x					2.2x	1.6x	1.4x	1.0x
EBITDA/Interest	14.4x	6.2x						4.0x					7.7x	9.5x	11.9x	13.1x

Source: UBS estimates and Company documents

Anadarko Petroleum Corp.

UBS Research

## UPSIDE / DOWNSIDE SPECTRUM

[return ↑](#)

**Upside (US\$114):** Our upside case assumes APC is acquired. In an environment where Super-Majors have under-invested in both global exploration and US unconventional shales, APC offers a one-stop solution, and we believe management is a willing seller. With most acquisitions of E&Ps historically done at NAV, we should note that our NAV estimate for APC is ~\$114/share, implying 9.4x normalized 2018E EV/DACF and +100% upside from current levels.

**Upside (US\$80):** Our \$80 price target assumes ~0.70x NAV, or 7.0x normalized 2018E DACF.

**Downside (US\$51):** Our downside case scenario assumes APC fails to meet its short- and long-term production targets, does not have exploration success, and its current FCF deficit widens. Under these assumptions and assuming current strip prices, we could see APC declining to 5.0x normalized 2018E DACF, implying a stock price move to ~\$51/share.

Anadarko Petroleum Corp.

UBS Research

## COMPANY DESCRIPTION

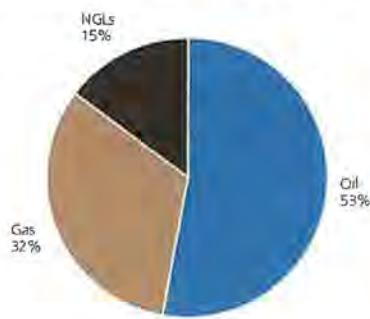
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Anadarko Petroleum is an independent oil and gas exploration and production company with operations in onshore resource plays in the Rocky Mountains, the southern US, and the Appalachian basin. The company is also among the largest independent producers in the deepwater Gulf of Mexico and has production and exploration activities worldwide, including Algeria, Mozambique, Colombia, Cote d'Ivoire, New Zealand, Ghana, Brazil, Kenya, and several other countries. Anadarko actively markets natural gas, oil, and natural gas liquids production and owns and operates gas-gathering systems in core producing areas.

## Industry outlook

While we came into 2017 with a cautious view of the E&P sector given expensive valuations, this year's sell-off has left us incrementally more positive with E&Ps now discounting a recovery near the long dated futures curve but below our 'normalized' forecasts. But as we expect oil prices to remain in a ~\$50-\$60/Bbl range this year, we continue to prefer well-capitalized, oil-weighted oil E&Ps that are both low on the cost curve and offer attractive relative valuation.

## Production by Commodity (2017E)



## Absolute and Debt-Adjusted Growth Metrics

Anadarko Petroleum (APC)	2016	2017	2018	2019	2020	2021	17-21 CAGR
Actual Production Growth	-5%	-17%	5%	8%	7%	7%	7%
Production per Debt-Adj Share Growth	-16%	-10%	7%	10%	10%	11%	9%
Cash Flow per Debt-Adj Share Growth	-46%	86%	35%	30%	14%	15%	23%

Source: Company Documents and UBS Estimates

**Forecast returns**

Forecast price appreciation	+42.1%
Forecast dividend yield	0.4%
Forecast stock return	+42.5%
Market return assumption	6.3%
Forecast excess return	+36.2%

**Valuation Method and Risk Statement**

Anadarko Petroleum is subject to risks associated with volatile movements in crude oil prices and natural gas prices. Anadarko also has exposure to political, economic and meteorological events as well as geological risk associated with resource exploration. Moreover, Anadarko's production and financial targets are best estimates and at risk of not being achieved while its limited financial guidance disclosures make the forecasting of future earnings results challenging. Our \$80 price target assumes ~0.70x NAV, or 7.0x normalized 2017E DACF.

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12-Month Rating	Definition	Coverage <sup>1</sup>	IB Services <sup>2</sup>
<b>Buy</b>	FSR is > 6% above the MRA.	46%	30%
<b>Neutral</b>	FSR is between -6% and 6% of the MRA.	38%	28%
<b>Sell</b>	FSR is > 6% below the MRA.	16%	18%
Short-Term Rating	Definition	Coverage <sup>3</sup>	IB Services <sup>4</sup>
<b>Buy</b>	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
<b>Sell</b>	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 31 March 2017.

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category.

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**UBS Securities LLC:** William A. Featherston; Michael Ziffer, CFA; Christopher Zhang, CFA.

#### Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
<b>Anadarko Petroleum Corp.</b> <sup>4, 6a, 8a, 7, 16, 26</sup>	APC.N	Buy		N/A	US\$56.28 02 May 2017
<b>Tullow Oil</b> <sup>20</sup>	TLW.L	Neutral (CBE)		N/A	205p 02 May 2017

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date.

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- 20. Because this security exhibits higher-than-average volatility, the FSR has been set at 15% above the MRA for a Buy rating, and at -15% below the MRA for a Sell rating (compared with 6/-6% under the normal rating system).
- 26. A U.S.-based global equity strategist, a member of his team, or one of their household members has a long common stock position in Anadarko Petroleum Corp.

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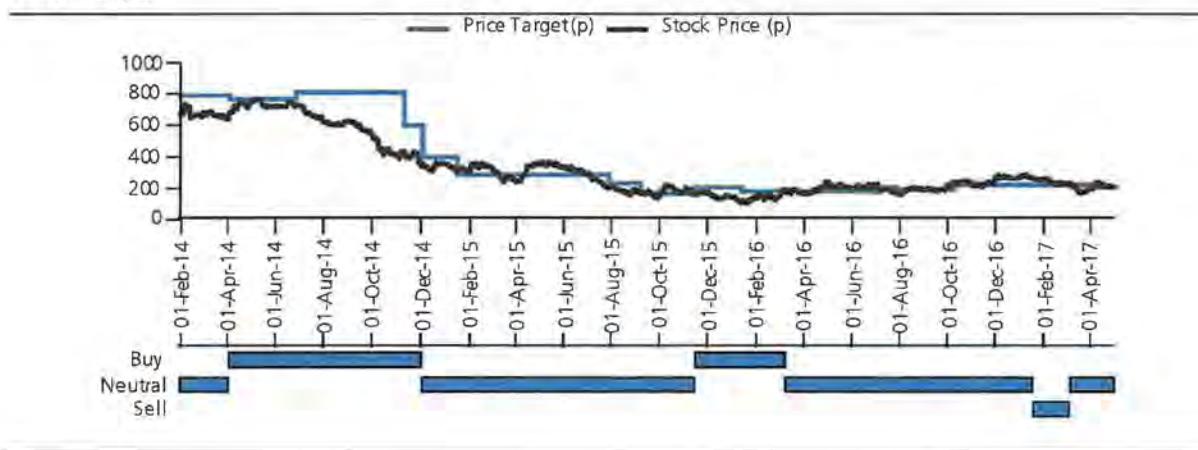
#### Anadarko Petroleum Corp. (US\$)



Date	Stock Price (US\$)	Price Target (US\$)	Rating
2014-01-31	80.69	95.0	Buy
2014-04-02	86.47	100.0	Buy
2014-04-03	99.02	110.0	Buy
2014-05-22	101.58	115.0	Buy
2014-06-11	108.32	120.0	Buy
2014-07-02	107.63	127.0	Buy
2014-10-06	97.19	125.0	Buy
2014-12-03	80.67	110.0	Buy
2015-01-26	82.66	100.0	Buy
2015-04-30	94.1	104.0	Buy
2015-06-24	81.45	98.0	Buy
2015-09-07	68.34	82.0	Buy
2015-11-11	61.01	77.0	Buy
2016-01-12	37.33	62.0	Buy
2016-02-02	39.26	60.0	Buy
2016-05-02	51.95	64.0	Buy
2016-07-06	55.19	69.0	Buy
2016-10-31	59.44	73.0	Buy
2016-12-05	68.29	79.0	Buy
2016-12-15	70.33	82.0	Buy
2017-01-18	69.89	81.0	Buy
2017-03-08	61.4	80.0	Buy

Source: UBS, as of 02 May 2017

### Tullow Oil (p)



Date	Stock Price (p)	Price Target (p)	Rating
2014-01-31	673.0	788.0	Neutral
2014-04-03	681.0	766.0	Buy
2014-06-27	726.0	809.0	Buy
2014-11-10	433.0	596.0	Buy
2014-12-03	359.0	396.0	Neutral
2015-01-16	311.0	285.0	Neutral
2015-07-29	201.0	230.0	Neutral
2015-09-07	168.0	166.0	Neutral
2015-11-06	186.0	196.0	Neutral
2015-11-16	162.0	204.0	Buy
2016-01-13	110.0	179.0	Buy
2016-03-09	182.0	179.0	Neutral
2016-07-04	219.0	204.0	Neutral
2016-07-28	166.0	192.0	Neutral
2016-10-10	239.0	222.0	Neutral
2017-01-19	256.0	222.0	Sell
2017-03-07	227.0	222.0	Neutral
2017-04-06	212.0	205.0	Neutral

Source: UBS; as of 02 May 2017

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